

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LONNIE G. JOHNSON

Appeal No. 2000-1327
Application No. 08/402,624

ON BRIEF

Before COHEN, ABRAMS, and STAAB, Administrative Patent Judges.
STAAB, Administrative Patent Judge.

DECISION ON APPEAL

Lonnie G. Johnson appeals from the examiner's final rejection of claims 1-18, all the claims pending in the application.

By way of background, this is the second appeal taken by appellant from the examiner's final rejection of the above claims. In Appeal No. 97-0277, this merits panel of the Board affirmed the examiner's rejection of claims 1-18 under 35 U.S.C. § 103, and pursuant to 37 CFR § 1.196(b) entered a new ground of

Appeal No. 2000-1327
Application No. 08/402,624

rejection of said claims under 35 U.S.C. § 103 based on an alternative secondary reference. In response to the new ground of rejection, appellant elected to continue prosecution in order to bring before the examiner evidence of nonobviousness that was not previously of record. Accordingly, although the appealed claims, applied references, and rejections are unchanged relative to their counterparts in the previous appeal, the record before us for review now includes the aforementioned evidence of nonobviousness.

Appellant's invention pertains to a toy water gun having an onboard water storage tank, a manually actuated pump, and an expandable pressure reservoir. Claim 1, a copy of which is appended to appellant's brief, is illustrative of the appealed subject matter.

The references of record relied upon by the examiner in support of rejections under 35 U.S.C. § 103 are:

Cloutier et al. (Cloutier)	4,509,659	Apr. 9, 1985
Salmon et al. (Salmon)	4,735,239	Apr. 5, 1988
Shindo	4,854,480	Aug. 8, 1989
Johnson et al. (Johnson)	5,150,819	Sep. 29, 1992

Claims 1-3, 5-9, 11-15, 17 and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Johnson in view of Shindo.

Appeal No. 2000-1327
Application No. 08/402,624

Claims 4, 10 and 16 stand rejected under 35 U.S.C. § 103 as being unpatentable over Johnson in view of Shindo, and further in view of Cloutier.

Claims 1-3, 5-9, 11-15, 17 and 18 stand further rejected under 35 U.S.C. § 103 as being unpatentable over Johnson in view of Salmon.

Reference is made to appellant's brief (Paper No. 20) and to the examiner's answer (Paper No. 24) for the respective positions of appellant and the examiner regarding the merits of these rejections.

Discussion

As a preliminary matter, we note that two declarations by inventor Lonnie G. Johnson have been submitted. The first Johnson declaration (Johnson I), signed on November 20, 1998, was submitted on December 11, 1998, as part of appellant's response (Paper No. 17) on that date. The second Johnson declaration (Johnson II), signed on August 6, 1999, was submitted on August 13, 1999, as an attachment to appellant's brief on appeal (Paper No. 20). The Johnson I and Johnson II declarations appear to be the same, with the exception of paragraph 7. More specifically, paragraph 7 of Johnson II includes a table of sales figures that is not included in paragraph 7 of Johnson I. A review of the

file history of the present application will reveal that we remanded this application to the examiner on several occasions to clarify the record as to whether the belatedly filed Johnson II declaration has been entered and considered. Based on the examiner's responses to our remands, we consider that the Johnson II declaration has been considered by the examiner.¹

We have given careful consideration to appellant's invention as described in the specification, to the appealed claims, to the prior art applied by the examiner, to the evidence of nonobviousness provided by appellant, and to the above noted positions advanced by appellant in the brief and by the examiner in the answer. These considerations have led us to reassess our position and now conclude that the applied reference evidence does *not* establish a *prima facie* case of obviousness of the claimed subject matter. Accordingly, we shall not sustain the above-noted rejections under 35 U.S.C. § 103. Our reasons follow.

¹The examiner's difficulty in comprehending that Johnson I and Johnson II are separate and distinct declarations may have been alleviated, at least to some extent, by appellant clearly and expressly stating in the appeal brief that Johnson II was a new declaration and not merely a copy of Johnson I, and by explaining how Johnson II differed from Johnson I.

At the outset, we presume familiarity on the reader's part with the issues and reasoning expressed in our previous decision in affirming the examiner's rejections and adding our new ground of rejection.

The Johnson reference applied as the primary reference in each of the standing rejections is appellant's own patent and would appear to constitute appellant's prior art jumping off point for the presently claimed invention. In Johnson, water stored in an onboard storage tank 38 is pumped by onboard manually actuated pump 31 into an *essentially rigid* pressure reservoir 3. The water introduced into the reservoir during the pumping operation acts to trap and compress air in pressure reservoir 3. This compressed air can be seen at reference numeral 92 in Figure 2. The manner of operation of the Johnson device is explained at column 2, lines 36-56, as follows:

As the amount of water and air forced into the pressure reservoir increases, the pressure of the air displaced by the water within the pressure reservoir increases. The pressure of the air and water within the pressure reservoir increases with each cycle of the pump, until the pump can no longer overcome the pressure of the air and water within the pressure tank. The pressurized air and water within the pressure tank has an avenue of release that is regulated by the trigger mechanism of the invention which has a safety pressure release within its design. When no force is applied to the trigger, the pressurized water and air are held at bay with no means of release. When force is applied to the

trigger, the heavier water is first released from the bottom of the pressurized container and is channeled through a narrow nozzle. The escape of the pressurized water through the narrow nozzle creates a stream of propelled water that lasts as long as the trigger is engaged or until the pressure within the pressurized container equals the ambient air pressure.

Thus, the mechanism for expelling water out the exit orifice of the water gun of Johnson is the air trapped and compressed in the pressure reservoir 3 as water and air are introduced into the pressure reservoir during the pumping operation.

The present invention differs from the prior art Johnson device in the way it expels water from the gun. More specifically, the present device employs "an *expandable* pressure tank adapted to hold liquid and *to expand upon depositing liquid therein* so as to exert a force upon the liquid" (specification, page 3; emphasis added). As explained in the paragraph spanning pages 5 and 6 of appellant's specification:

To release the pressurized water from the gun the trigger 17 is manually pulled to overcome the biasing force exerted by spring 48 upon pinch bar 47. Movement of pinch bar 47 from delivery tube 45 causes the pressurized water within tube 41, delivery tube 45 and pressure tank bladder 30 to be released as a stream from nozzle 21. The bladder contracts with expulsion of water therefrom but maintains a pressure upon the water until the bladder reaches a relaxed configuration.

The advantage of this arrangement over prior art water guns such as Johnson is set forth on page 7 of appellant's specification as follows:

The expandable pressure tanks as just describe[d] maintain a more constant pressure upon the water therein as compared to pressure tanks of the prior art utilizing compressed air. This is due to the fact that [in the prior art] as water is removed from the pressure tank the volume of airspace increases while the quantity of air remains the same. This results in a rapid decrease in air pressure pressurizing the water within the tank.

Thus, the key distinguishing feature of the presently claimed water gun relative to the prior art Johnson water gun is the expandable pressure reservoir. This feature is set forth in one form or another in each of the independent claims on appeal.

The references presently relied upon by the examiner, and by us in the prior decision, to bridge the gap between the prior art Johnson water gun and the claimed subject matter are Shindo and Salmon. In each of these references, water under pressure is forced into an elastic bladder by connecting the bladder to a source of pressurized water, such as a conventional faucet.² See Shindo, column 3, lines 19-35, and Salmon, column 2, lines 37-50.

²In the background section of the specification, appellant recognizes that water guns operating on this principle were known at the time of appellant's invention.

Appeal No. 2000-1327
Application No. 08/402,624

What the prior art does not disclose is a water gun having *both* an expandable pressure reservoir for expanding upon storing water therein so as to exert a force upon the water for subsequently expelling it *and* an onboard manually actuated pump for pumping water and air from an onboard storage tank to the expandable pressure reservoir.

There is no dispute that Johnson discloses the invention claimed in claims 1-3, 5-9, 11-15, 17 and 18 with the exception of the expandable pressure reservoir. There also is no dispute that Shindo and Salmon disclose expandable pressure reservoirs that function in the same manner as the expandable pressure reservoir of the claimed invention to expel water. However, based on a careful reconsideration of appellant's arguments as focused through the lens of appellant's evidence of nonobviousness, we now consider that it would *not* have been obvious to one of ordinary skill in the art at the time of appellant's invention to selectively combine these reference teachings in a manner that would result in the presently claimed subject matter.

As may be appreciated from a review of the Johnson I and Johnson II declarations, prior art water guns at the time of appellant's invention were not entirely satisfactory in providing

a strong yet constant stream of water in that prior art water guns that rely on compressed air to expel the water (e.g., the water gun of the Johnson reference) suffered from a decrease in the force of the stream of water as the water is expelled, and in that prior art water guns that utilized an expandable bladder filled and pressurized through a household water faucet (e.g., Shindo and Salmon) could not be refilled and repressurized unless they were recoupled to the faucet. Turning to the particulars of the proposed combination of reference teachings to render obvious the subject matter of claims 1-3, 5-9, 11-15, 17 and 18, Johnson teaches a "compressed air" scheme for propelling water, and the Shindo and Salmon references teach an "expandable bladder" scheme for propelling water. As we now see it, the combined teachings of Johnson and either Shindo or Salmon are deficient in that the references lack a clear suggestion for discarding Johnson's "compressed air" scheme in favor of the "expandable bladder" scheme of Shindo or Salmon while at the same time retaining Johnson's onboard manual pump means and water storage tank 38. Based on the teaching of the references themselves, and without benefit of appellant's disclosure, we consider that one of ordinary skill in the art at the time of appellant's invention would view the water gun of Johnson, with its "compressed air"

scheme for expelling water and onboard means for replenishing and repressurizing the pressure reservoir, and the water guns of Shindo and Salmon, with their "expandable bladder" scheme for expelling water and external means for replenishing and repressurizing the pressure reservoir, as being alternative ways of making a water gun that is capable of expelling a large amount of water.

Where, as here, prior art references require a selective combination of reference features to render obvious a claimed invention, there must be some reason for the combination other than hindsight gleaned from the invention disclosure, *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985). In the fact situation before us, we are now of the view that one of ordinary skill in the art would not have been motivated by the combined teachings of Johnson and either Shindo or Salmon to select and incorporate the "expandable bladder" scheme for expelling water into the water gun of Johnson while retaining Johnson's onboard water storage tank and onboard manually actuated pump for replenishing and repressurizing the pressure reservoir.

Appeal No. 2000-1327
Application No. 08/402,624

Accordingly, the rejection of claims 1-3, 5-9, 11-15, 17 and 18 as being unpatentable over Johnson in view of either Shindo or Salmon shall not be sustained.

The Cloutier reference additionally applied in the rejection of claims 4, 10 and 16 has also been considered, but does not overcome the deficiencies of Johnson and Shindo discussed above. Accordingly, the rejection of claims 4, 10 and 16 as being unpatentable over Johnson in view of Shindo and Cloutier also shall not be sustained.

The decision of the examiner finally rejecting the appealed claims is reversed.

REVERSED

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
)	
)	
)	
NEAL E. ABRAMS)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
LAWRENCE J. STAAB)	
Administrative Patent Judge)	

LJS:hh

Appeal No. 2000-1327
Application No. 08/402,624

DORIAN B. KENNEDY
KENNEDY, DAVIS & HODGE, LLP
FIVE CONCOURSE PARKWAY
SUITE 900
ATLANTA, GA 30328